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CLAIMS:

What is claimed is:

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1 1. A method for executing a function on a server in a
2 distributed data processing system, the method comprising
3 the computer-implemented steps of:

4 receiving a request for a function, wherein the
5 request comprises an input specifying a server name,
6 wherein the server responds to requests directed to a set
7 of server names; and

8 executing the function in a server name context on
9 the server as directed by the input specifying the server
10 name.

1 2. The method of claim 1 wherein the server name
2 context on the server comprises a set of resources
3 associated with a server name.

1 3. The method of claim 2 further comprising identifying
2 a membership of a resource within the set of resources
3 for the server name context.

1 4. The method of claim 3 further comprising generating
2 a server name tag for the server name, wherein the
3 membership of the resource in the set of resources is
4 identifiable by the server name tag associatively stored
5 with the resource.

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1 5. The method of claim 4 wherein the server name tag is
2 generated based on a value of the server name and a value
3 derived from a data structure that stores the server
4 name.

1 6. The method of claim 5 wherein the value derived from
2 the data structure is a position value of the server name
3 within a server name table that stores the set of server
4 names.

1 7. The method of claim 1 wherein the request for the
2 function is received from a network.

1 ~~8.~~ 8. The method of claim 1 further comprising:
2 locating the server name in an entry of a server
3 name table;
4 obtaining a location index for the entry; and
5 generating a server name mask based on the location
6 index.

1 9. The method of claim 1 further comprising:
2 generating a server name mask based on the server
3 name;
4 retrieving a server name mask for a resource from a
5 resource data structure; and
6 comparing the generated server name mask with the
7 retrieved server name mask to identify whether the
8 resource is applicable to the server name.

1 10. The method of claim 9 further comprising:

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2 repeatedly identifying a plurality of resources that
3 are applicable to the server name by searching a
4 plurality of resource data structures for matching server
5 name masks.

1 11. The method of claim 9 wherein the comparison of
2 server name masks is a bitwise AND operation.

12. 12. A data processing system comprising:
2 means for receiving a request for a function,
3 wherein the request comprises an input specifying a
4 server name, wherein the server responds to requests
5 directed to a set of server names; and
6 means for executing the function in a server name
7 context on the server as specified by the input
8 containing the server name.

1 13. The data processing system of claim 12 wherein the
2 server name context on the server comprises a set of
3 resources associated with a server name.

1 14. The data processing system of claim 13 further
2 comprising identification means for identifying a
3 membership of a resource within the set of resources for
4 the server name context.

1 15. The data processing system of claim 14 further
2 comprising generation means for generating a server name
3 tag for the server name, wherein the membership of the

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4 resource in the set of resources is identifiable by the
5 server name tag associatively stored with the resource.

1 16. The data processing system of claim 15 wherein the
2 server name tag is generated based on a value of the
3 server name and a value derived from a data structure
4 that stores the server name.

1 17. The data processing system of claim 16 wherein the
2 value derived from the data structure is a position value
3 of the server name within a server name table that stores
4 the set of server names.

18. The data processing system of claim 12 further
comprising:

locating means for locating the server name in an
entry of a server name table;
obtaining means for obtaining a location index for
the entry; and
generating means for generating a server name mask
based on the location index.

19. The data processing system of claim 12 further
comprising:

generating means for generating a server name mask
based on the server name;
retrieving means for retrieving a server name mask
for a resource from a resource data structure; and

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7 S comparing means for comparing the generated server
8 X name mask with the retrieved server name mask to identify
9 whether the resource is applicable to the server name.

1 20. The data processing system of claim 19 further
2 comprising:

3 repeatedly identifying a plurality of resources that
4 are applicable to the server name by searching a
5 plurality of resource data structures for matching server
6 name masks.

1 21. A computer program product on a computer readable
2 medium for use in a data processing system, the computer
3 program product comprising:

4 first instructions for receiving a request for a
5 function, wherein the request comprises an input
6 specifying a server name, wherein the server responds to
7 requests directed to a set of server names; and
8 second instructions for executing the function in a
9 server name context on the server as specified by the
10 input containing the server name.

1 22. The computer program product of claim 21 wherein the
2 server name context on the server comprises a set of
3 resources associated with a server name.